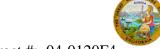
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009950 Address: 333 Burma Road **Date Inspected:** 06-Oct-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 845 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Li Jha and Xu Yumin **CWI Present:** Yes No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Trail Assembly

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Area

Signed Off Green Tag's

This Quality Assurance (QA) Inspector witnessed final tension verification for following depicted locations. Inspected 10% on a random basis and found the tension to be in general compliance and thus signed off the Green Tags.

At Segment 5CE at Panel Point 36 N(E) Lower Chevron Brace and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final torque required was 473 N-m and Green Tag No. 361.

At Segment 5CE at Panel Point 36 Lower Chevron Brace and Bolt Size used was M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m and Green Tag No. 360.

At Segment 5CE at Panel Point 36 Lower Chevron Brace and Bolt Size used was M22 x 80 RC Set# DHGM220050 and final torque required was 486 N-m and Green Tag No. 362.

Lift 2 (West)

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector performed Ultrasonic Test along with Mr. Bert Madison at the Transverse Segment Weld for Lift 2 West and the weld nos. were as following.

OBW2A-006 – Side Panel Cross Beam side.

OBW2-001 – Edge Panel Counter Weight side.

OBW2-005 - Edge Panel Cross Beam side.

Found no recordable indications.

Lift 2 (East)

This QA Inspector performed Ultrasonic Test along with Mr. Bert Madison at the Transverse Segment Weld for Lift 2 East and the weld nos. were as following.

OBE2-001 – Edge Panel Bike Path side.

OBE2-005 – Edge Panel Cross Beam Side.

Found no recordable indications.

Segment 5BE and Segment 5CE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Longitudinal Diaphragm. The weld joint has been performed against B-WR6986 Rev.0. The welder is identified as 062092. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-Repair.

Segment 5AE to Segment 5BE

This QA Inspector observed ZPMC welding personnel performing Heat Straightening for Longitudinal Diaphragm Cross Beam side. The Heat Straightening has been performed against HSR1 (B)-7674 Rev.0 for LD 5BE to 5AE.

Segment 5BE and 5CE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Transverse Segment weld at Bottom Panel after back gouging from external side. The weld joint has been identified as OBE 5A-008. The welder is identified as 067571. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2212-Tc-U4b-F.

Segment 1AAW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for transverse stiffener which is welded in between the I-Ribs of 1AAW. The weld joint has been identified as OBW1-45. The welder is identified as 220064. In process FCAW appears to be progressing in compliance with

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133 and WPS-BT-2134.

### Segment 5BE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for 5BE Deck Panel extension plate connecting to FL3 at PP 34. The weld joint has been identified as OBE5-022 and 023. The welder is identified as 067571. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2144-Tc-U4b-FCM-1 and WPS-B-P-2114-FCM-1.

#### Segment 1AAW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for transverse stiffener which is welded in between the I-Ribs of 1AAW. The weld joint has been identified as OBW1-103 and 104. The welder is identified as 220067. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133 and WPS-BT-2134.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer